

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A focus detection device comprising:
 - a solid state image sensing device including a first photoelectric conversion element array which photoelectrically converts a first light beam passing through a first area of an exit pupil of a photographing optical system, and a second photoelectric conversion element array which photoelectrically converts a second light beam passing through a second area of the exit pupil which is different from the first area; and
 - a computing device which detects a focus state of the photographing optical system by computing a correlation between a first shading-corrected image signal which is an image signal from the first photoelectric conversion element array and a second shading-corrected image signal which is an image signal from the second photoelectric conversion element array in accordance with a position of a focus detection area in an image sensing frame on the basis of a ratio between a shift amount of a focus detection opening pupil from an optical axis, formed when limitation is imposed caused by being limited by an exit window of the photographing optical system, ~~with respect to an optical axis,~~ and a width of the focus detection opening pupil.
2. (Currently Amended) A focus detection method wherein a first light beam passing through a first area of an exit pupil of a photographing optical system is photoelectrically converted by a first photoelectric conversion element array, a second light beam passing through a second area of the exit pupil which is different from the first area is photoelectrically converted by a second photoelectric conversion element array, and a focus state of the photographing optical system is detected by computing a correlation between a first shading-corrected image signal which is an image signal from the first photoelectric conversion element array and a second shading-corrected image signal which is an image signal from the second photoelectric conversion element array in accordance with a position of a focus detection area in an image sensing frame on the basis of a ratio between a shift amount of a focus detection opening pupil from an optical

axis, formed when limitation is imposed caused by being limited by an exit window of the photographing optical system, with respect to an optical axis, and a width of the focus detection opening pupil.

3. (Previously Presented) A computer program recorded on a computer-readable medium for causing a computer to execute the focus detection method recited in claim 2.
4. (Cancelled).

The following NEW claims are now presented for consideration by the Examiner:

5. (NEW) The device of claim 1, wherein information utilized to create the shading-corrected image signal is obtained from a digital memory in a photographing lens.